

### REMARKS

Claims 1,2,4,6,8,9,11-17, and 31-46 are under consideration. Claims 1,2,4,6,8,9,11-17, and 31-46 were rejected in the Office Action dated July 30, 2002. Claims 1,11,31,32,36, and 37 have been amended. Each of the above claims that were not amended is dependent upon an amended claim. Applicants ask that the above claims be reconsidered.

The Examiner rejected claims 1-2,4,6,8-9,11-17,41 and 43 under 35 USC § 112, first paragraph, for failing to provide a disclosure which was enabling for the claims. Applicant apologizes for errantly forgetting to include the Declaration in the previous amendment. The Declaration of Professor Abraham Korol has been included with this amendment. The Declaration exhibits Mr. Korol's success applying this process to both tomato and melon. Indicating that taxonomically and structurally divergent plants can be transformed by the method disclosed. In addition, Claim 1 has been changed to include the limitation "tomato or melon" in place of "flowering plants", in accordance with the suggestion made in the Office Action.

The previous claims contained several informalities, all of which have been corrected accordingly.

- Claims 1 and 31 lacked antecedent basis for the limitation "said vortexed paste" in part (f). Applicant's attorney disagrees, but has amended the claim in the interest of expediting the allowance of this application. The previous part (g) has been expanded to contain the phrase "thereby producing a vortexed paste."

- Examiner stated Claims 11 and 37 also lack antecedent basis for the limitation “the selection of transformants” in lines 1-2. Applicant’s attorney disagrees that this limitation lacked antecedent basis. In order to comply with the Examiner’s objections Claims 1 and 31 have been amended, and now utilize “the selection of transformants” in place of “selecting for transformants.”
- The limitation “said silicon carbide fibers” has been removed from claim 32.
- The limitation “said plasmid DNA” has been changed to “said solution of plasmid DNA.”
- Examiner wrote, “Claim 36 lacks antecedent basis for the limitation ‘said selectable marker’.” Applicant’s attorney understood this as a typographical error and adjusted claim 38, which did contain the limitation “said selectable marker.” The limitation has been changed to “said specific cloned selectable marker.”

Applicants have made a diligent effort to amend the Claims and respond to the various rejections made in the Office Action. If for any reason, the Examiner should deem this application not in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney to resolve any outstanding issues prior to issuing a further Office Action.

Respectfully Submitted,

Rashida A. Karmali

Rashida A. Karmali, Esq.,  
Reg. No. 43,705  
Attorney for Applicants  
99 Wall Street, 10<sup>th</sup> Floor  
New York, NY 1005  
212-651-9654

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### Marked-up Claims

1. (Thrice Amended) A method for genetic transformation of [a flowering plant] tomato or melon, said method comprising the steps of:

- (i) preparing a silicon carbide fiber solution;
- (j) preparing a pollen germination medium;
- (k) preparing a DNA solution;
- (l) mixing said silicon carbide solution with said pollen germination medium and said DNA solution to form a mixture;
- (m) adding fresh pollen into said mixture to form a paste;
- (n) vortexing said paste for 30 to 60 seconds, thereby producing a vortexed paste;
- (o) applying said vortexed paste on female reproductive plant parts for pollination; and
- (p) selection of [selecting for] transformants.

11. (Thrice Amended) The method of Claim 1, wherein the selection of transformants is performed by [looking for] growing the phenotypic expression of a specific cloned selectable marker gene with a phenotypic expression, said expression being selected from the group consisting of both an antibiotic resistance gene and a herbicide resistance gene, said cloned selectable marker gene selected from the group consisting of an antibiotic resistance gene and a herbicide resistance gene.

31. (Twice Amended) A method for genetic transformation of maize, tomato, or melon reproducing sexually, said method comprising the steps of:

- (i) preparing a silicon carbide fiber solution;

- (j) preparing a pollen germination medium;
- (k) preparing a DNA solution;
- (l) mixing said silicon carbide solution with said pollen germination medium and said DNA solution to form a mixture;
- (m) adding fresh pollen into said mixture to form a paste;
- (n) vortexing said paste for 30 to 60 seconds; thereby producing a vortexed paste
- (o) applying said vortexed paste on female reproductive plant parts for pollination; and
- (p) selection of [selecting for] transformants.

32. (Twice Amended) The method of Claim 31, wherein [said silicon carbide fibers of] said silicon carbide fiber solution used in step (a) are approximately 0.1-20  $\mu\text{m}$  in diameter and 1-250  $\mu\text{m}$  in length.

36 (Amended) The method of Claim 31, wherein said solution of plasmid DNA is dissolved in a Tris EDTA solution.

37. (Thrice Amended) The method of Claim 31, wherein the selection of transformants is performed by [looking for] growing the phenotypic expression of a specific cloned selectable marker gene with a phenotypic expression, said expression being selected from the group consisting of both an antibiotic resistance gene and a herbicide resistance gene, said cloned selectable marker gene selected from the group consisting of an antibiotic resistance gene and a herbicide resistance gene.